

Executive Summary:

Prenatal care is instrumental for healthy pregnancy and birth outcomes for all women, but especially so for pregnant Latina women. Pregnant Latina women have been noted to have more barriers to prenatal care than their white counterparts, including language barriers, work conflicts, lack of health insurance, and difficulty in patient-provider communication (Bromley et al., 2012; Fryer et al., 2021; Shaffer, 2002; Tandon et al., 2005). While individual health literacy improvements can help pregnant Latina women engage more effectively in the system, literature indicates that organizations may have more power to improve health outcomes for the populations they serve by employing organizational health literacy practices such as using plain language, improving spoken communication, and tailoring health education (Brach, 2017; Arrighi et al., 2022). The Mid Shore Health Improvement Coalition (Coalition) participating coalition members can improve their organizational health literacy by using more engaging health communication like infographics and videos, as well as working collaboratively with each other and the community (Arrighi et al., 2022; Auger et al., 2015; Bonilla et al., 2012). The following report outlines results from an adapted organizational health literacy assessment of the Coalition.

Report of Results:

This project analyzed data collected from interviews and a materials assessment from five Coalition members. The coalition members that were involved in this project were:

1. One Public Education and Communications Manager from the Maryland Poison Center
2. One Maternal Child Health Registered Nurse from Talbot County Health Department
3. One Director of Women & Children's Services and one Clinical Educator in Women and Children's Health from University of Maryland Shore Regional Health (UMDSRH)
4. One Team Lead Community Health Advocate from Priority Partners Managed Care Organization (MCO)
5. One Midwife from Choptank Community Health

Interview Findings:

Interviews were coded into the following themes and subthemes, which outline commonalities between interviews, pinpoint areas of importance, and offer suggestions for improvements.

<i>Themes</i>	<i>Subthemes</i>
Organizational health literacy facilitators	<ul style="list-style-type: none"> ● Having certified interpreters and translators and offering classes in Spanish ● Directly engaging with clients to make appointments, have referrals, and understand materials ● Implementing a feedback process and making changes based on feedback

Organizational health literacy barriers	<ul style="list-style-type: none"> ● Limiting patient-centered design to language considerations ● Organization communication practices ● Challenges in organization capacity to improve community engagement
Prenatal services currently offered	<ul style="list-style-type: none"> ● Offering classes online, in-person, and in home visit format ● Teaching clients about a wide range of prenatal topics for the different trimesters ● Educating in different ways during labor and delivery and for potential problems
Challenges in offering prenatal programming	<ul style="list-style-type: none"> ● Offering health communication only in English for a Spanish-taught program ● Limited or no attendance of classes
Successes in offering prenatal programming	<ul style="list-style-type: none"> ● Offering incentives for completing tasks at an event or attending class ● Modeling education plan after other programs
Participant perception of personal health literacy barriers	<ul style="list-style-type: none"> ● Transportation, lack of childcare, and relying on others as reasons for not coming to classes ● Limited skill in navigating system due to not speaking English ● Cultural differences in best practices for prenatal care
Systemic challenges impacting organizations	<ul style="list-style-type: none"> ● Limited prenatal resources in the Maryland Mid-Shore ● Collaboration challenges between other offices and health departments ● Temporality of prenatal care
Creation of health communication	<ul style="list-style-type: none"> ● Health communication is created by marketing team ● Creation process is limited by convenience and budget ● Reading level is the health literacy benchmark
Promotion of health communication	<ul style="list-style-type: none"> ● Health communication is promoted via in-person and online means ● Promotion strategy is recommended by marketing team ● Promotion is limited by organization capacity
Future aspirations & next steps	<ul style="list-style-type: none"> ● To expand capacity of offerings and ability of organization to follow through ● Create more in-depth classes that foster community building ● Start health education younger

Materials Assessment Findings:

Materials were graded against the following three tools:

1. SMOG, a readability assessment tool
2. The HLE2, an organizational health literacy evaluation tool
3. The CDC Clear Communication Index, a tool to evaluate and create health communication

Choptank Community Health’s materials were excluded from the assessment, as they did not meet study inclusion criteria. Talbot County Health Department provided two print materials that met inclusion criteria. A total of five print materials and four websites were reviewed.

SMOG:

Scoring: Scores are based on school grade levels. Past grade level twelve, grades thirteen through sixteen indicate a need for college education, grades seventeen and eighteen a graduate level education, and grades nineteen and up a higher professional qualification for proper comprehension of material. Organizations who participated in this project reported ideal reading level scores that ranged from 4th-6th grade.

<i>Organization</i>	<i>SMOG Score</i>
UMDSRH	14th grade
Talbot County Health Department	11th grade
Priority Partners	14th grade
Maryland Poison Center	9th grade

HLE2:

Scoring: Percentages indicate the amount that materials adhere to health literacy considerations of audience usability. Better scores are those that are closer to 100%.

<i>Organization</i>	<i>HLE2: Print Materials</i>	<i>HLE2: Web Materials</i>
UMDSRH	39%	54%
Talbot County Health Department	55%	50%
Priority Partners	55%	71%
Maryland Poison Center	77%	51%

CDC Clear Communication Index:

Scoring: An ideal score on the Index is a 90 or higher, if materials score under a 90, materials should be improved to increase target audience comprehension.

<i>Organization</i>	<i>CDC Clear Communication Index Score</i>
UMDSRH	36.40
Talbot County Health Department	27.30, 54.50
Priority Partners	72.70
Maryland Poison Center	42.10

Recommendations:

After analyzing the literature, interviews, and materials, it is recommended that the participating coalition members consider the following to improve organizational health literacy:

1. **Update program materials** to adhere to organization readability and health literacy goals. To improve, organizations can (1) grade materials via at least two readability formulas, (2) write according to the Federal Plain Language Guidelines, and (3) target materials to the end user. To update materials, it is recommended that you use the following tools:
 - a. The SMOG Readability Assessment, which has been found to be one of the most reliable and consistent readability formulas. The Ohio State University has a SMOG resource guide [available here](#).
 - b. The [CDC Clear Communication Index](#) can help you write for your audience. The Index is research driven and easy to use via a fillable PDF resource [available here](#).
2. **When updating materials, include relevant information** that is important to your target audience, pregnant Latina women, in all health communication materials. Specifically, it is important to include if your organization's services are free or paid, accept Medicaid patients, accept patients regardless of immigration status, and accept uninsured patients.
3. **Translate all communication** into Spanish. All future programming and promotion, including fliers, advertisements, registration forms and/or websites, and registration phone lines, should be available in Spanish to ensure audience understanding.
4. **Engage with the marketing department** to ensure marketing is congruent with organization goals. The marketing department of your organization may not fully understand the needs of your audience, but working with them will allow the process to benefit the organization and target population.
5. **Distribute health communication in a varied, multichannel approach** in formats that pregnant Latina women are more likely to engage with.
 - a. Latina women seek health information through a wide range of channels and formats. Most commonly, Latina women seek health information from friends and family, doctors, online, television, radio, and online sources. In recent years, there has been a shift in preference to easily accessible and convenient sources of information online through social media and websites.

- b. Your organization will be successful in reaching pregnant Latina women if it adopts a varied and multichannel approach to distributing health information.
6. **Develop the feedback process** to encourage pregnant Latina women to speak up about their needs. It is important to set up a formal feedback process, available in Spanish, that the community can comfortably use to help improve your services.
 - a. Feedback should be gathered in varied ways to see what works best for your audience. You can gather feedback from patient/participant surveys, through informal conversations, or after appointments in patient portals. Be sure to create a sound, trusting relationship that allows space for feedback.
7. **Work with the community** to understand how to best serve them through applying the culture-centered approach. Your organization can leverage the [culture-centered approach](#) to work with community members to identify the health problems and barriers that are important to them, along with potential solutions. This approach promotes community understanding of health issues and solutions while being a source of empowerment.
 - a. This approach is distinct from being culturally sensitive, as cultural sensitivity seeks to educate a culture about predetermined issues in a top-down approach, where culture-centeredness works bottom-up to determine what is known, what education is needed, and how this education should be developed.
 - b. Many barriers identified by organizational employees were educated guesses, and this formative research indicated a need for community engagement. Engagement will allow the audience to share their opinions on improvement, communication preferences, current personal health literacy barriers, and how your organization can best assist them moving forward.
 - c. You can engage by (1) speaking to people at community places of meeting such as restaurants, churches, and laundromats, (2) leveraging events you attend as connection points, and (3) building rapport and calming nerves in conversations.

Resources for Improvement

To achieve the goals set in these recommendations, it is suggested that the Mid Shore LHIC Coalition members use the following resources:

1. [The Maryland Plain Language Checklist](#) to improve written materials and ensure audience comprehension of material the first time they read it
2. [The University of Maryland Horowitz Center for Health Literacy and Maryland Consumer Health Information Hub's Web Content Review Tool](#) to improve websites to be clear, concise, and organized
3. [The CDC Clear Communication Index](#) to evaluate and improve current materials to better serve their target audience
4. [The Federal Plain Language Guidelines](#) to review as a resource and deeper information about plain language if your organization would like more information after using the Maryland Plain Language Checklist

